ICE PRODUCTS

5

3   Matters Relating to Satisfaction of   )
4   Conditions for Offering InterLATA Service   )   Docket No. 6720-TI-120
5   (Wisconsin Bell, Inc. d/b/a Ameritech   )
6   Wisconsin)   )

7   DIRECT TESTIMONY OF ALI MILLER
8   ON BEHALF OF MCI TELECOMMUNICATIONS CORPORATION
9   (OSS ISSUES)

10   Q.   Please state your name and business address.

     A.   My name is Ali Miller. I am employed by MCI with responsibility as Market

12   Manager for local service in the Ameritech region. My business address is 707 17th

13   St., Denver, CO, 80202

14   Q: Please describe your current responsibilities.

15   A: I am responsible for coordinating all activities involved in order for MCI to offer

16   residential local service in the Ameritech states. I am also the main point of contact

17   to Ameritech for MCI's Mass Markets organization. In this capacity, I have worked

18   extensively with Ameritech with respect to their OSS for all resale ordering

19   activities. I have worked with Ameritech to conduct testing on a small scale for

20   their manual ordering process as well as submitting orders through their EDI

          interface.

465

1   A.   Yes, they would.

2   MR. BERMAN: I would ask that Ms.

3   Miller's prepared direct testimony and surrebuttal

4   testimony be incorporated into the record as if

5   presented this afternoon.

6   EXAMINER JAMES: Is there any

7   objection?

8   (No response.)

9   EXAMINER JAMES: We will incorporate the

10   testimony and the surrebuttal testimony.

11   (The prepared testimony of Ali Miller

12   was incorporated into the record as follows:)

13   *   *   *

14

15

16

17

18

19

20

21

22

23

24

25

1 Q: **Please describe your education and relevant background.**

2 A: I have a Bachelors of Business Administration from the College of William and

3   Mary and a Masters of Management from the Kellogg School of Business at

4   Northwestern University. Prior to working at MCI, I worked at Andersen

5   Consulting to help develop and implement sophisticated automated business systems.

6 Q: **What is the purpose of your testimony?**

7 A: The purpose of my testimony is to respond to claims by Ameritech: (a) that it

8   provides unbundled access Operations Support Systems (OSS) functions in

9   conformance with FCC regulations; and (b) that Ameritech's OSS systems and

10   interfaces are fully ready and complete to satisfy its other obligations under section

11   271 of the Telecommunications Act. In short, I conclude that Ameritech is not

12   operationally ready from an OSS perspective to provide interconnection, unbundled

13   network elements, or resale in a timely, reliable, and nondiscriminatory manner, and

14   in quantities that may be reasonably requested.

     My testimony is in three parts. Part I presents a general background on OSS

15

16   functions, their development, and the role they play in the provision of local

17   exchange service as well as the development of local competition. In Part II, I

18   explain why Ameritech's OSS functions are not ready to provide CLECs

19   interconnection and access to unbundled network elements, such as loops, switches,

20   and transport, in a timely, reliable, and nondiscriminatory manner. Part III explains

21   why Ameritech's OSS functions for resale service are likewise "not ready for prime

2

1   time."

2   My testimony is focused primarily on the question of Ameritech's operational

3   readiness, i.e., basic capabilities without regard to order volume. I will not address

4   Ameritech's claimed "capacity readiness." Capacity readiness issues can be

5   intelligently assessed only in the presence of adequate operational readiness.

6   Because Ameritech's systems are demonstrably not operationally ready, the further

7   question of capacity readiness -- namely, what further increases in volume can the

8   system accommodate? -- is moot.

9   I.   **BACKGROUND: THE ROLE AND IMPORTANCE OF OSS**

10   Q: **First the basics. What is "OSS"?**

11   A: In order to appreciate the importance of OSS, it is necessary first to understand what

12   OSS is and does. As one recent industry publication put it, "OSS includes

13   everything that runs or monitors the network, such as trouble reporting or billing

14   systems, but is not actually the network itself."[1] Stated otherwise, OSS consists of

15   all the computerized and automated systems, together with associated business

16   processes, that ensure the carrier can satisfy customer needs and expectations. This

17   bears repeating: OSS is more than a series of interfaces. The most sophisticated

18   graphical interfaces with pull-down menus are worth little if there are insufficient

19   business processes behind the interfaces. In today's environment, a carrier simply

---

20   [1] Ed Feingold, <u>Making Sense of OSS</u>, Billing World, Jan. 1997, at 21, 22.

1   cannot compete without powerful and efficient operations support capabilities. It is

2   customary and useful to distinguish five discrete business functions OSS serves:

3   pre-ordering, ordering, provisioning, maintenance & repair, and billing, as is

4   explained in the FCC's Local Competition Order.[2]

5   Q: **Doesn't Ameritech already have OSS in place to serve its own retail customers?**

6   A: Like all Bell Operating Companies (BOCs), Ameritech has for years utilized highly

7   complex OSS systems to successfully manage its internal processes and customer

8   interactions. These well-tested systems ensure, for example, that customer service

9   representatives have immediate real-time access to all information necessary to

10   respond fully and correctly to customer queries about such things as the variety and

.1   prices of services available, or the status of repair calls. They also ensure, among

12   other things, that customer orders are correctly processed and that bills are timely,

13   complete, and accurate.

14   Ameritech's existing systems are presumably complete and adequate to serve

15   its own retail customers. Consistent with the Telecommunications Act of 1996,

16   however, changes must be made to enable competition to develop in the local

17   markets. To the extent new competitors such as MCI must rely on the ILEC's

18   network and OSS capabilities for a realistic opportunity to compete, it will be

19   essential for the ILEC to develop and implement OSS interfaces and downstream

20   [2] See _Implementation of the Local Competition Provisions in the Telecommunications_
21   _Act of 1996_, First Report and Order, at ¶¶ 515, 518, CC Docket No. 96-98, FCC 96-325
22   (rel. Aug. 8, 1996) (hereinafter "Local Competition Order").

1   processes sufficient to ensure that it can provide unbundled network elements and

2   resale in timely, reliable, and nondiscriminatory fashion in volumes adequate to

3   satisfy demand. Another related point is that the FCC's rules specifically require

4   that ILECs develop interfaces capable of providing CLECs nondiscriminatory

5   unbundled access to its OSS functions themselves. I understand this requirement to

6   mean that ILECs must provide parity to requesting CLECs across three dimensions:

7   scope of information available; accuracy of information supplied; and timeliness of

8   communication.

9   The critical need for ILECs to develop systems and interfaces appropriate for

10   a multi-carrier environment can perhaps best be understood by considering how

11   highly developed and well integrated OSS systems already are in competitive

12   industries. For example, I can phone up my travel agent and, in a short phone call,

13   book and have confirmed a set of flights with different airlines. I can even reserve a

14   specific seat and a special meal. In the same call, I can get prices on, and/or

15   reserve, a rental car and a hotel with a no-smoking room. If I am not sure which

16   hotel I would prefer, my travel agent can help me choose one close to where my

17   meeting is scheduled. What's more, the next day I can phone up my agent and

18   cancel or revise any element of my total reservation package. I can do all of this

19   without ever speaking with a representative of any of the companies that provide the

20   underlying services. In short, OSS systems and interfaces that work seamlessly

21   among companies in real time are both essential for the development of efficient

22   competition and feasible.

1 Q: **How does MCI intend to access Ameritech's OSS systems?**

2 A: In theory there are numerous ways a CLEC might be able to access Ameritech's

3 OSS functions. One basic distinction is between automated access and manual

4 access. Manual access means that the CLEC's access is mediated by human

5 intervention on the part of the BOC. For example, when a CLEC orders a resale

6 service or unbundled element manually, it ordinarily means that the CLEC transmits

7 an order form to Ameritech by facsimile, at which point a BOC employee types the

8 information supplied on the form into Ameritech's computerized order entry system.

9 Manual intervention also occurs when, after information is exchanged electronically,

10 an Ameritech employee must re-enter or otherwise manipulate it before it can be

11 processed downstream.

12 In contrast, automated access means that information is exchanged between

13 the CLEC and BOC computers. This can be done through a variety of different

14 interfaces and protocols that range widely in degrees of sophistication and utility.

15 The most sophisticated type of automated access is termed electronic bonding and is

16 articulated by several different specific protocols, the most common of which is the

17 Open Systems Interconnect (OSI) Common Management Information Services

18 Element (CMISE) Common Management Information Protocol (CMIP) network

19 management protocol. Electronic bonding solutions are the most sophisticated and

20 useful because, in certain applications, they can allow new entrants to approximate

21 the same real-time access to the BOC's functions as the BOC itself enjoys. From

22 the customer's perspective, that is the end user, interactions with a CLEC that has

6

1   electronically bonded to the ILEC are indistinguishable from interactions with the

2   ILEC. Furthermore, because electronic bonding links the CLEC's existing OSS

3   system to that of the ILEC, the CLEC does not need to develop a new OSS to

4   interface with the ILEC for a given function.

5   Less sophisticated automated access arrangements involve the transfer of data

6   between computer systems in batches. These "batch transfer" solutions work much

7   like electronic mail, but are much more rigorously structured in terms of format,

8   syntax and vocabulary. A common batch transfer interface for most applications,

9   Electronic Data Interface ("EDI"), is also termed a "transactional" interface because

10   it has long been used for ordinary business transactions like exchanging bills of

11   lading or service orders. File transfer protocol, perhaps the classic batch interface,

12   transmits large amounts of data at scheduled and infrequent intervals.

13   Manual access arrangements are simply not compatible with MCI's needs as a

14   new entrant seeking to compete against an entrenched incumbent. Every manual

15   intervention causes delay, sometimes substantial, and creates significant risk of error.

16   By relying upon manual interventions, Ameritech can hold its competitors hostage to

17   its own response time, hours of operation, and ability (or incentive) to provide

18   accurate information. Also, manual arrangements increase CLECs' costs in two

19   ways: CLECs must employ more people to handle the process and to audit

20   Ameritech's performance; and Ameritech will try to pass its own inflated costs

21   through to the CLECs. Accordingly, solutions that require manual intervention on

22   Ameritech's side cannot be acceptable in either the short or long term. Ameritech

1   does not argue to the contrary.

2   Q: **What type of automated arrangement would be satisfactory to MCI?**

3   A: The short answer is that Ameritech should adopt the automated interfaces and data

4   formats adopted and approved by the relevant national standard-setting bodies or

5   industry forums. The four principal groups are: the Ordering and Billing Forum

6   ("OBF") of the Carrier Liaison Committee; the T1 Committee; the Electronic

7   Communications Implementation Committee ("ECIC"); and the Electronic Data

8   Interchange (EDI) Committee of the Telecommunications Industry Forum (TCIF).

9   All four are sponsored by the Alliance for Telecommunications Industry Solutions

10   ("ATIS"). Ameritech should adopt standardized systems for two reasons.

11   First, for CLECs, like MCI, that hope to compete in markets presently

12   controlled by different BOCs, it is absolutely critical that interfaces be uniform

13   across regions. The costs of developing systems and software and of training

14   necessary to use any particular interface are substantial. This is why most BOCs try

15   to unify their own systems. Ameritech, for example, uses the same OSS interfaces

16   and formats throughout its region and has a single OSS service center, which is

17   located in Milwaukee, Wisconsin, to serve all five states in its region. A nationwide

18   CLEC like MCI must be able to realize similar economies. We can only do so,

19   however, if the several large ILECs conform to nationally standardized interfaces

20   and formats.

21   Second, the industry forums are well positioned to resolve which interfaces

8

472

1   and formats are reasonably necessary and practical for each particular OSS function

2   or sub-function.   Different functions and services may create different OSS needs.

3   While electronic bonding solutions -- with their real-time accessibility -- are

4   essential for any function that is conducted while the carrier's service representative

5   is actually speaking with the end-user (such as all pre-ordering functions), some

6   sorts of batch transfer solutions might adequately serve competitive needs for other

7   functions.

8   For both of these reasons, I agree with the FCC that "[i]deally, each

9   incumbent LEC would provide access to support systems through a nationally

10   standardized gateway." Local Competition Order ¶ 527.   Consistent with this view,

11   MCI is investing its development funds for OSS in the technical interface solutions

12   developed through the industry forums.   The FCC chose to rely on the carriers to

13   agree to nationally standardized interfaces voluntarily.   Regardless of the wisdom of

14   that decision for purposes of implementing section 251 of the Act, I believe that the

15   likelihood that the large ILECs and CLECs will reach voluntary consensus on

16   nationally uniform interfaces will be sorely tested if the BOCs are allowed to offer

17   in-region long distance services before such solutions are adopted.   Because the time

18   and additional capital investment required for CLECs to develop non-standard OSS

19   interfaces represents a considerable barrier to entry, regulatory incentives toward

20   standardization are critical.

21   Q: Have the industry forums set standards for all OSS systems?

9

473

1   A: While the industry forums have made substantial progress, they have not yet

2   established standards for all OSS functions. In particular they have not finalized

3   interfaces and standards for the information exchanges that typically occur before a

4   CLEC actually places an order with an ILEC. Although this process can and should

5   be completed promptly, one still has to ask what a BOC should be expected to do in

6   the interim in order to satisfy section 271. One thing is clear: BOCs should not

7   adopt a non-standard solution and refuse to conform to the standard when adopted.

8   To the extent that standard-setting forums have not yet adopted standards for all

9   functions, Ameritech should be expected to adopt the least costly interim solution

10   that would give requesting carriers the same level of access to the BOC's OSS

11   functions as the BOC itself enjoys. It is not reasonable for Ameritech to implement

'2   any interim solution that would require CLECs to commit substantial resources of

13   their own to access the ILEC's solution when equally adequate interim solutions can

14   be devised that would prove less costly to the ILEC's would-be local competitors.

15   Q: **What is your recommendation in light of the fact that the industry forums have**

16   **not yet provided standards for each OSS function?**

17   A: In short, Ameritech's OSS interfaces should be deemed satisfactory only if these

18   conditions are satisfied: (1) Wherever there exists an existing industry standard,

19   Ameritech must have adopted and implemented it; and (2) wherever an industry

20   standard does not yet exist, Ameritech must (a) enter into a binding contractual

21   commitment (backed up by adequate contractual guarantees and regulatory penalties)

10

474

1   to comply with industry standards as soon as possible (pursuant to a specified

2   implementation schedule) and (b) offer and implement an interim solution that gives

3   requesting carriers the same level of access that Ameritech's operational groups have

4   to its systems, and that is as consistent as possible with expected industry standards.

5   Because OSS interfaces, like other software packages and operating protocols (e.g.,

6   WordPerfect and Microsoft Windows) are periodically updated and improved,

7   conformance with industry standards requires adoption of the most advanced

8   available specifications for a given standardized interface. For example, that would

9   mean Ameritech should presently be using the long-available EDI version 6.0 for

10   ordering functions and should shortly transition to EDI version 7.0, recently

11   approved by the Telecommunications Industry Forum and endorsed by the OBF.

12   The pro-competitive conditions I have set forth above are not unduly onerous

13   to Ameritech. In fact, Ameritech argued before the FCC this summer that ILECs

14   should be obligated to conform their electronic interfaces to existing industry

15   standards. See Local Competition Order ¶ 513. And I understand that Ameritech

16   has recently reassured the FCC that it will adopt all future industry solutions in a

17   timely fashion. Unfortunately, Ameritech has thus far refused to formalize this

18   commitment in its interconnection agreement with MCI. In particular, it has

19   steadfastly refused to endorse EDI Versions 6.0 or 7.0.

20   Q: Would it be sufficient if Ameritech agrees to adopt standards set by the

21   industry forums?

11

475

1   A: The adoption and implementation of an appropriate OSS interface, configured to

2   appropriate specifications, is a necessary condition for the development of local

3   competition, but it is far from sufficient. The interface merely governs the

4   communication between the ILEC and CLECs. The theoretical capacity for rapid

5   and efficient communication between the carriers is of minimal utility if either the

6   ILEC lacks the internal systems necessary satisfactorily to effect the functions a

7   particular interface is designed to support, or the CLECs lack the systems, software,

8   and training needed to make efficient and effective use of the OSS access provided.

9   Therefore, before a BOC can establish that it will be able to provide unbundled

10   network elements or resale services in a competitively acceptable manner, it must

11   demonstrate both that its OSS interfaces are linked to downstream systems that can

2   provide the necessary functionalities in a prompt and trouble-free fashion, and that it

13   provides adequate training and support to competing local carriers. I will address

14   these two points in order.

15   Q: **What specifically must Ameritech do after it develops interfaces for CLECs?**

16   A: Once the ILEC has devised, tested, and implemented its interfaces, it must design,

17   develop and test business processes adequate to carry out the relevant inter-carrier

18   business functions. Because this is a critical point that Ameritech substantially

19   downplays, I would like to elaborate.

20   OSS is not just about inter-carrier interfaces. To the contrary, as mentioned

21   earlier, Ameritech and other ILECs must, and do, have advanced OSS capabilities

1   simply to run their internal operations that have nothing do with the particular LEC's

2   relationship to other carriers. Some of these processes will work essentially the

3   same way whether the function at issue is performed for an end-user or a CLEC.

4   For example, when a customer orders new service from a reseller that requires a line

5   to be turned up, the reseller basically stands in the shoes of Ameritech: if the

6   interfaces between the two carriers work as they should, the fact that the pre-

7   ordering and ordering processes are mediated through a new carrier (the CLEC)

8   should not add additional complication to Ameritech's existing provisioning systems.

9   That is, the provisioning function itself should look much the same regardless

10   whether the end-user takes that service directly from Ameritech or from a reseller of

11   the BOC's service.

12   But there are other ways in which the new CLEC-ILEC dynamic does impose

13   new requirements on Ameritech's downstream systems. For example, when a CLEC

14   resells an existing service to an existing Ameritech customer, the processing of that

15   order requires a communication between the ILEC's ordering and billing systems

16   that Ameritech does not otherwise engage in for itself. In other words, the entire

17   phenomenon of migrating an existing line with existing vertical services is one that

18   Ameritech did not perform in a pre-resale world. Similarly, when a CLEC orders

19   unbundled elements, the new challenge for Ameritech is not only to receive and

20   understand that order (this is where the ordering interfaces come in), but also to

21   carry out that order. Before the 1996 Act, the ILECs did not have OSS systems in

22   place to effectuate the unbundling of, say, local switching.

477

1   Q: **Assuming Ameritech has developed its end of the appropriate interfaces, linked**

2   **to downstream business processes, should that be sufficient evidence that**

3   **Ameritech's systems are "tested and operational"?**

4   A: Even assuming that Ameritech has deployed an appropriate interface and has

5   adequately tested downstream systems that can accommodate all foreseeable demand

6   in a nondiscriminatory fashion, it remains independently critical that the CLEC is

7   able to use the ILEC's interfaces effectively Otherwise, it cannot be conclusively

8   said that Ameritech's interfaces are tested and operational. One may be tempted to

9   assume that the ability or inability to use the interfaces is the CLECs' own problem,

10   and that Ameritech has no responsibility to train or support the new entrants. I am

11   informed that this position has already been expressed by the Commissioners at a

`2   recent open meeting. However, from the perspective of ordering system

13   development, I respectfully suggest that this is a mistaken view. The ILECs in

14   general, and certainly Ameritech, drive the process. They select the interface, tailor

15   its specifications and vocabulary, and control the timing of its implementation.

16   Moreover, as the staff of the Wisconsin Commission has explained, because a CLEC

17   will have to rewrite its own OSS interfaces whenever Ameritech modifies its

18   interfaces, "a company with significant market share [like Ameritech] can extend

19   that market share" simply by revising its OSS specifications.[3] This is true even if

20   Ameritech were to nominally adopt an interface approved by an industry forum

---

21   [3] Memorandum Re: Matters Relating to Satisfaction of Conditions for Offering
`2   InterLATA Service, Docket No. 6720-TI-120, at 11 (Wisc. PSC, Feb. 6, 1997).

478

| 1 | | because most industry-standard interfaces are loosely defined to allow individual |

1   because most industry-standard interfaces are loosely defined to allow individual

2   carriers flexibility in tailoring their own specifications. Consequently, just as the

3   market requires the manufacturer of a complicated software package to provide

4   initial and ongoing customer support, this Commission must ensure that Ameritech

5   provides CLECs with adequate training and ongoing assistance -- including complete

6   and intelligible manuals and pull-down on-screen menus where necessary.

7   Moreover, the process of ensuring that the business processes linked to a

8   given OSS interface work as planned is itself lengthy and requires careful planning

9   and testing. After each carrier's systems are developed and deployed, it is necessary

10   to conduct "integration" testing -- full end-to-end trials designed to make sure that

11   the systems can communicate properly with each other to accomplish the intended

12   results in the designed manner. After integration testing has been successfully

13   completed, it is time to put the systems into actual competitive use, supporting "live"

14   customer transactions. Even once this stage of actual implementation is reached,

15   however, testing is not completed. To the contrary, it is almost inevitable that the

16   early stages of actual competitive use will reveal design and operating flaws that had

17   escaped detection up through integration testing, thus requiring further trouble-

18   shooting and system modification.

19   Q: **What if Ameritech can demonstrate that it has internally tested each area of its**

20   **OSS systems? Would that demonstrate that the OSS systems are operational**

21   **and commercially ready?**

22   A: Experience proves the critical point that a successfully tested OSS system is not the

1   same thing as an operationally and commercially satisfactory system. For example,

2   Bell Atlantic has been re-engineering many of their OSS systems since 1995. In

3   November 1996, it implemented the second phase of the new release of its

4   Subscription System, which processes PIC changes. Bell Atlantic assured MCI and

5   other IXCs that its new version had satisfied thorough internal testing before being

6   introduced for commercial use. Nonetheless, the new system has been disastrous in

7   actual operation. For example, it has failed to process numerous properly inputted

8   PIC change orders, has delayed the processing of many others for a week or longer,

9   and has returned incorrect responses to MCI orders that, among other things,

10   incorrectly report existing subscriber accounts as nonexistent or closed. Furthermore,

11   Bell Atlantic's OSS lacked controls to identify the processing problem quickly. As

2   a result, weeks passed before MCI was even notified that Bell Atlantic was not

13   properly effectuating customer PIC changes. Needless to say, these system failures

14   have caused substantial customer confusion and dissatisfaction. They have also

15   imposed losses on MCI that could amount to millions of dollars in lost revenue.

16   Bell Atlantic has even acknowledged that these problems are directly due to errors in

17   its OSS systems. However, it remains uncertain whether all errors have been

18   corrected yet. And although this example concerned Bell Atlantic, the point equally

19   applies to Ameritech: even with the best of intentions, successful internal testing

20   does not necessarily equate to commercial readiness.

21   As the foregoing discussion should make clear, from an OSS perspective,

22   paper promises are not enough to ensure effective real-world application. Because

480

1   deploying "operationally ready" OSS is a substantial and time-consuming

2   undertaking, there is a real difference between saying a system is ready, as compared

3   to actually using it to provide services in a commercially satisfactory way. In light

4   of the innumerable potential glitches and pitfalls that must be eliminated prior to

5   commercial availability, the Commission cannot determine whether Ameritech's OSS

6   systems are sufficient until tested by a full and varied track record under real-world

7   conditions. In short, OSS must be in real competitive use (not just business trials),

8   subject to auditing and monitoring of key performance indicators and/or operation

9   performance indicators before OSS can be deemed to be operationally and

10   competitively satisfactory.

11   II.   ASSESSMENT OF AMERITECH'S OSS SYSTEMS

12   Q: In light of the criteria you described above, are Ameritech's OSS systems

13   adequate?

14   A: Given this background, for reasons I will explain in detail, I believe Ameritech's

15   OSS systems are patently inadequate. Ameritech appears far from either offering

16   non-discriminatory unbundled access to OSS functions or ensuring that other

17   checklist items can be provided in timely, reliable, nondiscriminatory fashion, and in

18   volumes adequate to meet demand. In my view, Ameritech falls short both because

19   it employs inappropriate interfaces and because it does not demonstrate that even

20   these interfaces and supporting systems are operationally ready.

481

1   Q: **Please summarize your overall criticisms of Ameritech's OSS interfaces.**

2   A: First, many of the interfaces Ameritech purports or promises to employ are plainly

3   unsatisfactory to meet competitive needs because (a) the interfaces do not provide

4   the type of interactivity that meets real competitive demands; and/or (b) they

5   impose excessive demands on CLECs to adapt their own systems to interfaces that

6   may prove entirely unique to Ameritech. Second, even where Ameritech's interfaces

7   are adequate, they often cannot be deemed operationally ready. It bears emphasis

8   that very few of Ameritech's automated interfaces are in present commercial use for

9   the functions they are purported to support. The others have only been tested in

10   simulated competitive trials. In my opinion, Ameritech vastly exaggerates the utility

11   of such tests. While alpha and beta testing are essential steps in the developmental

12   process, the lessons that can be learned from successful tests is far more limited than

13   Ameritech represents. Moreover, MCI's experience with Ameritech demonstrates

14   that its tests have not been nearly as successful as Ameritech claims.

15   To assist the Commission and the Hearing Examiner in following the discrete

16   criticisms that follow, I have included as an appendix to this testimony, as Schedule

17   1 (Exhibit 24), a chart summarizing the shortcomings of Ameritech's application

18   from an OSS perspective. Specific functions and sub-functions are listed in Column

19   1. Column 2 lists, for each function, the OSS interface that is required from a pro-

20   competitive standpoint. Wherever industry forums have recommended a particular

21   interface, that is the interface listed. In the case of pre-ordering functions, where

1   industry standards have not yet been finalized, I have listed the appropriate interim

2   and long-term solutions instead. Column 3 lists the interfaces Ameritech proposes

3   or purports to use. Column 4 identifies whether and, if so, when Ameritech's

4   interface began being put to actual commercial use by competitors. This is not

5   necessarily the date on which Ameritech claims it first made the interface

6   "available." Column 5 presents my conclusions as to whether the interface upon

7   which Ameritech relies, and the associated business processes, are at a stage of

8   development and implementation sufficient to support the conclusion that Ameritech

9   can provision the relevant service or function in a competitively satisfactory fashion

10   -- that is, with adequate reliability, timeliness, and in adequate volume.

11   I would put "yes" in that last category wherever Ameritech had demonstrated

12   that its OSS functions and interfaces are operationally ready. As things stand today,

13   however, I cannot supply an affirmative response for any OSS sub-function because

14   in no case does Ameritech present a track record of satisfactory success and duration

15   that would allow an OSS engineer to conclude with any confidence that the

16   functions will operate so as to furnish the relevant service or function to requesting

17   carriers at parity to the level the ILEC supplies itself. As a consequence, the

18   notations that appear in Column 5 are "not demonstrated" and "disproved." The

19   former indicates simply that, from an OSS engineering perspective, Ameritech has

20   not yet satisfied its burden of demonstrating operational readiness. The latter denotes

21   that there exists concrete evidence demonstrating that Ameritech is not operationally

22   ready.

Finally, I would like to emphasize two additional points about the fifth

2   column. First, because I believe that manual intervention is necessarily an

3   unacceptable solution, I have marked "disproved" wherever Ameritech proposes to

4   rely on a manual interface. Second, wherever Ameritech employs an automated

5   interface, the question addressed in column 5, effectively, is whether _that_ interface

6   has been adequately tested. Consequently, the chart graphically demonstrates that

7   several of Ameritech's unacceptable interfaces are also inadequately tested.

8   Conversely, for instances in which Ameritech's automated interface is itself

9   nonstandard, my conclusion that the operational readiness has not been demonstrated

10   does not qualify my judgment that the interface is, in any event, inappropriate.

III.   UNBUNDLED NETWORK ELEMENTS

12   **Q: Please share your assessment of Ameritech's OSS systems for Unbundled**

13   **Network Elements.**

14   A: With respect to OSS systems for UNEs, let me assess the facial and

15   operational adequacy of each of the five principal OSS functions -- pre-order, order,

16   provisioning, maintenance and repair, and billing -- in turn.

17   Pre-Ordering

18   Q: What is your assessment of Ameritech's proposed pre-ordering OSS systems?

1   A: The pre-order function involves the exchange of information between carriers prior

2   to, and in anticipation of, the placing of an actual order. In other filings, Ameritech

3   has listed five key sub-functions that are currently being provided to

4   telecommunication carriers: (1) access to customer service records; (2) the ability to

5   select and reserve telephone numbers while the end-user is on-line; (3) determination

6   of features available to the end-user; (4) the ability to select an order due date and to

7   schedule any necessary outside work while the end-user is on-line; and (5) address

8   validation.

9   Q: **Are the five sub-functions offered by Ameritech sufficient?**

10   A: This list is incomplete. In order for local competition to be fully viable, eleven

11   separate pre-order sub-functions must be electronically supported. The additional six

12   are: (6) block of direct inward dial (DID) numbers inquiry; (7) telephone number's

13   trouble history; (8) directory listings information (including yellow page header,

14   directory provider, directory cut-off date, etc.); (9) DID trunk inquiry; (10) available

15   primary interexchange carrier (PIC) inquiry; and (11) unbundled network element

16   service provider inquiry.

17   These missing functionalities are presently being addressed at the OBF and

18   are important. The last one, for example, is essential in an environment in which

19   multiple service providers might be providing different pieces of a single customer's

20   service -- where, say, carrier A furnishes the loop, carrier B furnishes the switching

21   capability, and carrier C furnishes directory assistance services. By overlooking this

485

1   functionality, Ameritech's pre-order OSS fails to present all information that a CLEC

2   requires at the pre-ordering stage in order to convert an existing customer services

3   through an unbundling situation involving another CLEC. Thus, only Ameritech has

4   visibility into the existing unbundled network architecture for a customer that

5   converts between CLECs. This is discriminatory.

6   The most important point here is that with respect to pre-ordering OSS

7   functionality, Ameritech currently offers less than 50% of the essential elements.

8   Q: What is your assessment of the pre-order OSS interfaces that Ameritech does

9   provide at this time?

10   A: Significantly, even the OSS interfaces Ameritech employs for the various pre-order

'1   sub-functions ~~that does accompany~~ do not satisfy fundamental competitive needs.

12   Let me explain. The overwhelming business requirement for a pre-ordering interface

13   is the ability of the ILEC system to provide real-time, up to date information, on a

14   customer within seconds of an electronic request -- while the customer is on the line.

15   Anything short of this key capability fails to meet customers' expectation for

16   customer service from any service agency whether it be credit, insurance, catalog, or

17   telephone services. Ameritech's proposed use of Electronic Data Interchange (EDI)

18   technology for the CSR, telephone number selection, and due date selection sub-

19   functions fails to provide for this key capability. Critically, Ameritech has refused,

20   at least in negotiations with MCI, to provide any binding assurance that its systems

21   will be able to provide even a near real-time response (i.e., on the order of 5 - 10

486

1   seconds) while processing a set level of transactions per hour. While I have seen

2   video tape demonstrations which portray near instant response time, my

3   understanding of Ameritech's actual systems and capabilities suggest that the quick

4   response time was for demonstration purposes only. In the real world, if

5   Ameritech's pre-ordering OSS systems do not provide the same instant access to

6   critical information as Ameritech's own customer representatives enjoy, MCI and

7   other CLECs will be severely disadvantaged.

8   I should add then that Ameritech's current proposal for pre-ordering systems

9   is completely unsatisfactory as a long-term solution. MCI's position has been, and

10   continues to be, that an Electronic Bonding solution based on the proven

11   implementation of an Open System Interconnect (OSI) Common Management

12   Information Services Element (CMISE) Common Management Information Protocol

13   (CMIP) electronic communications protocol will best meet this business requirement.

14   Efforts are already underway at the Electronic Communications Implementation

15   Committee ("ECIC") to develop such a real time OSS gateway specification for pre

16   ordering. Assuming Ameritech and other BOCs participate cooperatively, MCI

17   expects these to be finalized and available this year.

18   Q: **Despite your criticisms of the type of pre-ordering interfaces proposed by**

19   **Ameritech, have you made any assessment of the progress Ameritech has made**

20   **in bringing its proposed systems to operational readiness?**

21   A: To the best of my knowledge, Ameritech had not provided sufficient evidence for

23

487